



Sound Crew presents:

# The Mosquito

The Mosquito was invented by a store owner in England to repel loitering teens who made his customers uncomfortable. He played high pitch frequencies through speakers outside his store, and since high pitches are really annoying to kids and teens but can't be heard by adults as well (or at all), the teens would leave but the adult customers could come in.

## MATERIALS

- Speakers
- Computer with sound software, like Audacity
- CD player

The highest frequency that may be heard by any human is 20000 Hz. As you get older, your ability to hear high frequencies decreases. You can take a test on the Wild Music website to find the highest frequency you can hear. Go to <http://www.wildmusic.org/aboutsound/mosquito>

## MAKE YOUR OWN TONES

1. You can create tones on a computer, using a sound generating program like Audacity (available free at <http://audacity.sourceforge.net/>) and test yourself and your friends.
2. In Audacity, make a new track, and choose Generate Tone... from the menu. Type in the frequency of the tone you want.
3. Make the tone the length of time you want (like two seconds), by highlighting and deleting the rest of the track. Add additional tracks and tones if you like.
4. You can export your tones as an mp3 or wav file and burn them on a CD, or play the sounds right from the computer.
5. Test yourself and your friends to find the highest tone you can hear. Keep track of people's ages and gender to see if you notice trends about who can hear high frequencies and who can't.

Sound Crew is a team of teenagers who worked on the Wild Music project, in the Science Museum of Minnesota's Youth Science Center. During 2005 and 2006, they developed a number of sound and music activities and tested them with kids in the museum and the community.